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| **What will we be learning?**  **Year 12 Classification and Evolution** | **Why this? Why now?**  Previous Learning  Year 11 Inheritance  Future Learning  Year 12 Patterns of inheritance  Enquiry Processes  Analyse Patterns, Draw conclusions, Present data, Justify opinions, Collect data, Present data, Plan variables | **Key Words:**  **Binomial system**  **Blood serum**  **Classification**  **Courtship behaviour**  **DNA base sequence**  **DNA hybridisation**  **Hierarchy**  **Phylogenetic tree**  **Precipitate** |
| **What will we learn?**   * About the biological classification of species * About the binomial system of naming species and the advantage of such a system * The features used to classify organisms into the five kingdoms: Prokaryotae, Protoctista, Fungi, Plantae, Animalia * About the evidence that has led to new classification systems, such as the three domains of life, which clarifies relationships * The relationship between classification and phylogeny * The evidence for the theory of evolution by natural selection * The different types of variation * The different types of adaptations of organisms to their environment * The mechanism by which natural selection can affect the characteristics of a population over time * How evolution in some species has implications for human populations   **Misconceptions in this topic**  Humans DID NOT ‘evolve from monkeys’ …we share a common ancestor  More complex organisation DOES NOT mean ‘more evolved’ | |
| **What opportunities are there for wider study?**  Careers  Ecology Forensics Horticulture Biochemistry Fisheries Work Agriculture Marine Biology Laboratory Work Teaching Biotechnology Veterinary Work Environmental science Zoology  STE(A)M  https://highcliffe.sharepoint.com/sites/LearnSTEM | |
| **How will I be assessed?**  End of topic assessment  PAG 12.1 Drosophila Crosses | |